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10 AMAZON WEB SERVICES, INC., and
TWITCH INTERACTIVE, INC.
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14 UNITED STATES DISTRICT COURT
15 NORTHERN DISTRICT OF CALIFORNIA
16 SAN FRANCISCO DIVISION

17 BSD CROWN, LTD.,

18 Plaintiff,

19 v.

20 AMAZON.COM, INC.,
21 AMAZON WEB SERVICES, INC., and
TWITCH INTERACTIVE, INC.,

22 Defendants.
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27
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Case No. 3:23-cv-00057-WHO

DEFENDANTS' ANSWER TO
COMPLAINT

DEMAND FOR JURY TRIAL

Judge: William H. Orrick

1 Defendants Amazon.com, Inc. (“Amazon”), Amazon Web Services, Inc. (“AWS”), and
2 Twitch Interactive, Inc. (“Twitch”) (collectively, “Defendants”) hereby answer Plaintiff BSD
3 Crown, LTD’s (“BSD” or “Plaintiff”) Complaint as follows. Defendants adopt the headings used
4 in the Complaint for ease of reference. To the extent that the headings themselves contain factual
5 and legal characterizations, Defendants deny such characterizations.

6 **INTRODUCTION**

7 1. Defendants lack knowledge or information sufficient to form a belief as to the truth
8 of the allegations in paragraph 1 and footnote 1 of the Complaint, and therefore deny them.

9 2. Defendants admit that, on its face, Exhibit 1 to the Complaint purports to be a copy
10 of U.S. Patent No. 6,389,473 (the “’473 patent”). Defendants further admit that Exhibits 2, 3, and
11 4 to the Complaint appear to be charts purportedly mapping claim 1 of the ’473 patent against
12 products or services that Plaintiff contends infringe that claim. Defendants deny infringement,
13 either literally or under the doctrine of equivalents, of any valid and enforceable claim of the ’473
14 patent. Defendants lack knowledge or information sufficient to form a belief as to the truth of the
15 remaining allegations in paragraph 2 of the Complaint, and therefore deny them.

16 3. Defendants admit that the image in paragraph 3 of the Complaint appears in
17 Exhibit 5 to the Complaint, which purports to be a webpage entitled “The White House 1998 Easter
18 Egg Roll.” Defendants lack knowledge or information sufficient to form a belief as to the truth of
19 the remaining allegations in paragraph 3 of the Complaint, and therefore deny them.

20 4. Defendants admit that the quote in paragraph 4 of the Complaint appears in Exhibit 6
21 to the Complaint, which purports to be a news article dated November 16, 2000, and published on
22 the EE Times website. Defendants lack knowledge or information sufficient to form a belief as to
23 the truth of the remaining allegations in paragraph 4 of the Complaint, and therefore deny them.

24 5. Defendants lack knowledge or information sufficient to form a belief as to the truth
25 of the allegations in paragraph 5 of the Complaint, and therefore deny them.

26 6. Answering for Amazon, Amazon admits that certain of its subsidiaries use live video
27 streaming platforms. Answering for AWS, AWS admits that it provides live video streaming
28 services. Answering for Twitch, Twitch admits that it provides live video streaming services.

1 Defendants deny infringement, either literally or under the doctrine of equivalents, of any valid and
2 enforceable claim of the '473 patent. Defendants lack knowledge or information sufficient to form
3 a belief as to the truth of the remaining allegations in paragraph 6 of the Complaint, and therefore
4 deny them.

5 7. Defendants admit that the first quote in paragraph 7 of the Complaint appears in
6 Exhibit 7 to the Complaint, which purports to be a news article dated June 16, 2020, and published
7 on CNBC's website. Defendants deny infringement, either literally or under the doctrine of
8 equivalents, of any valid and enforceable claim of the '473 patent. Defendants lack knowledge or
9 information sufficient to form a belief as to the truth of the remaining allegations in paragraph 7 of
10 the Complaint, and therefore deny them.

11 **NATURE OF THE ACTION**

12 8. Defendants admit that the Complaint purports to initiate an action for patent
13 infringement under the patent laws of the United States, Title 35 of the United States Code.
14 Defendants deny infringement, either literally or under the doctrine of equivalents, of any valid and
15 enforceable claim of the '473 patent. Defendants lack knowledge or information sufficient to form
16 a belief as to the truth of the remaining allegations in paragraph 8 of the Complaint, and therefore
17 deny them.

18 **PARTIES**

19 9. Defendants lack knowledge or information sufficient to form a belief as to the truth
20 of the allegations in paragraph 9 and footnote 3 of the Complaint, and therefore deny them.

21 10. Amazon admits that it is a Delaware corporation having a principal place of business
22 in Seattle, Washington. Amazon does not contest, for the purposes of this action only, that venue
23 in the Northern District of California is proper.

24 11. AWS admits that it is a Delaware corporation having a principal place of business
25 in Seattle, Washington. AWS admits that venue in the Northern District of California is proper.

26 12. Twitch admits that it is a Delaware corporation having a principal place of business
27 in San Francisco, California. Twitch admits that venue in the Northern District of California is
28 proper.

13. Defendants admit that AWS and Twitch are wholly-owned subsidiaries of Amazon. The remaining allegations in paragraph 13 of the Complaint call for a legal conclusion to which no response is required. To the extent a response is required, Defendants deny the remaining allegations in paragraph 13 of the Complaint.

JURISDICTION AND VENUE

14. Defendants admit that this Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338.

15. Amazon does not contest, for the purposes of this action only, that jurisdiction in the Northern District of California is proper. Amazon admits that certain of its subsidiaries conduct business in the Northern District of California, including at offices located at 475 Sansome St., San Francisco, CA 94111. Amazon denies that it has committed any acts of infringement within this District, the State of California, or any other State or District.

16. AWS admits that jurisdiction in the Northern District of California is proper. AWS further admits that it conducts business in the Northern District of California, including at 475 Sansome St. San Francisco, CA 94111. AWS denies that it has committed any acts of infringement within this District, the State of California, or any other State or District.

17. Twitch admits that jurisdiction in the Northern District of California is proper. Twitch admits that it conducts business and in the Northern District of California, including through offices located at 350 Bush St., San Francisco, CA 94104. Twitch denies that it has committed any acts of infringement within this District, the State of California, or any other State or District. Answering for AWS, AWS admits that it conducts business in the Northern District of California. AWS denies that it has committed any acts of infringement within this District, the State of California, or any other State or District.

18. Answering for Amazon and AWS, Amazon and AWS deny that they have committed any acts of infringement within this District, the State of California, or any other State or District. Answering for Twitch, Twitch lacks knowledge or information sufficient to form a belief as to the truth of the allegations in paragraph 18 of the Complaint, and therefore denies them.

19. Answering for Twitch, Twitch denies that it has committed any acts of infringement

1 within this District, the State of California, or any other State or District. Answering for Amazon
2 and AWS, Amazon and AWS lack knowledge or information sufficient to form a belief as to the
3 truth of the allegations in paragraph 19 of the Complaint, and therefore deny them.

4 20. Answering for Amazon, Amazon does not contest, for purposes of this action only,
5 that venue in the Northern District of California is proper. Answering for AWS and Twitch, AWS
6 and Twitch admit that venue in the Northern District of California is proper. Answering for AWS
7 and Twitch, AWS and Twitch admit that they conduct business in the Northern District of
8 California. Answering for Amazon, Amazon admits that certain of its subsidiaries conduct business
9 in the Northern District of California. Defendants deny that they have committed any acts of
10 infringement within this District, the State of California, or any other State or District. The
11 remaining allegations in paragraph 20 of the Complaint call for a legal conclusion to which no
12 response is required. To the extent a response is required, Defendants deny them.

13 **FACTUAL BACKGROUND**

14 **The '473 Patent and Its Litigation History**

15 21. Defendants admit that on the face of Exhibit 1, the '473 patent is entitled "Network
16 Media Streaming" and issued on May 14, 2002.

17 22. Defendants lack knowledge or information sufficient to form a belief as to the truth
18 of the allegations in paragraph 22 of the Complaint, and therefore deny them.

19 23. Defendants lack knowledge or information sufficient to form a belief as to the truth
20 of the allegations in paragraph 23 of the Complaint, and therefore deny them.

21 24. Defendants admit that HTTP refers to a communication protocol. Answering for
22 Amazon, Amazon admits that its subsidiaries AWS and Twitch use services capable of streaming
23 video to multiple viewers simultaneously. Answering for AWS and Twitch, AWS and Twitch admit
24 that that they offer services capable of streaming video to multiple viewers simultaneously.
25 Defendants lack knowledge or information sufficient to form a belief as to the truth of the remaining
26 allegations in paragraph 24 of the Complaint, and therefore deny them.

27 25. Defendants admit that Emblaze Ltd. ("Emblaze"), a predecessor of Plaintiff, filed a
28 case against Apple Inc. ("Apple") for patent infringement that was transferred to the Northern

1 District of California (*Emblaze Ltd. v. Apple Inc.*, Case No. 5:11-cv-01079). Defendants further
2 admit that Emblaze filed a case against Microsoft Corporation (“Microsoft”) in the Northern
3 District of California (*Emblaze Ltd. v. Microsoft Corporation*, Case No. 3:12-cv-05422).
4 Defendants lack knowledge or information sufficient to form a belief as to the truth of the remaining
5 allegations in paragraph 25 of the Complaint, and therefore deny them.

6 26. Defendants lack knowledge or information sufficient to form a belief as to the truth
7 of the allegations in paragraph 26 of the Complaint, and therefore deny them.

8 27. Defendants lack knowledge or information sufficient to form a belief as to the truth
9 of the allegations in paragraph 27 of the Complaint, and therefore deny them.

10 28. Defendants lack knowledge or information sufficient to form a belief as to the truth
11 of the allegations in paragraph 28 of the Complaint, and therefore deny them.

12 **The HLS Standard**

13 29. Defendants admit that HLS is a video streaming communications protocol.
14 Defendants deny infringement, either literally or under the doctrine of equivalents, of any valid and
15 enforceable claim of the ’473 patent. Defendants lack knowledge or information sufficient to form
16 a belief as to the truth of the remaining allegations in paragraph 29 of the Complaint, and therefore
17 deny them.

18 30. Defendants lack knowledge or information sufficient to form a belief as to the truth
19 of the allegations in paragraph 30 of the Complaint, and therefore deny them.

20 31. Defendants admit that the quoted language in paragraph 31 of the Complaint appears
21 in Exhibit 8 to the Complaint, which purports to be a document describing the HTTP Live
22 Streaming Protocol. Defendants lack knowledge or information sufficient to form a belief as to the
23 truth of the remaining allegations in paragraph 31 of the Complaint, and therefore deny them.

24 32. Defendants admit that the chart in paragraph 32 appears in Exhibit 9 to the
25 Complaint and that the image labelled “Fig. 2,” without red annotations, appears in Exhibit 1 to the
26 Complaint. Defendants lack knowledge or information sufficient to form a belief as to the truth of
27 the remaining allegations in paragraph 32 of the Complaint, and therefore deny them.

28 33. Defendants deny infringement, either literally or under the doctrine of equivalents,

1 of any valid and enforceable claim of the '473 patent. Defendants lack knowledge or information
2 sufficient to form a belief as to the truth of the remaining allegations in paragraph 33 of the
3 Complaint, and therefore deny them.

4 34. Defendants deny infringement, either literally or under the doctrine of equivalents,
5 of any valid and enforceable claim of the '473 patent. Defendants lack knowledge or information
6 sufficient to form a belief as to the truth of the remaining allegations in paragraph 34 of the
7 Complaint, and therefore deny them.

8 35. Defendants admit that the quotes in paragraph 35 appear in Exhibit 9 to the
9 Complaint. Defendants lack knowledge or information sufficient to form a belief as to the truth of
10 the remaining allegations in paragraph 35 of the Complaint, and therefore deny them.

11 **The MPEG-DASH Standard**

12 36. Defendants deny infringement, either literally or under the doctrine of equivalents,
13 of any valid and enforceable claim of the '473 patent. Defendants lack knowledge or information
14 sufficient to form a belief as to the truth of the remaining allegations in paragraph 36 of the
15 Complaint, and therefore deny them.

16 37. Defendants admit that the quote in paragraph 37 of the Complaint appears in
17 Exhibit 10 to the Complaint. Defendants lack knowledge or information sufficient to form a belief
18 as to the truth of the remaining allegations in paragraph 37 and footnote 4 of the Complaint, and
19 therefore deny them.

20 38. Defendants admit that the image in paragraph 38 of the Complaint appears in
21 Exhibit 11 to the Complaint. Defendants lack knowledge or information sufficient to form a belief
22 as to the truth of the remaining allegations in paragraph 38 of the Complaint, and therefore deny
23 them.

24 39. Defendants deny infringement, either literally or under the doctrine of equivalents,
25 of any valid and enforceable claim of the '473 patent. Defendants lack knowledge or information
26 sufficient to form a belief as to the truth of the remaining allegations in paragraph 39 of the
27 Complaint, and therefore deny them.

Defendants' Knowledge of the '473 Patent

40. Answering for Amazon, Amazon admits that Amazon Technologies, Inc. ("ATI") filed U.S. Patent App. No. 14,635,254 ("254 application") on March 2, 2015 and that, on December 18, 2015, the '473 patent was cited as a prior art reference in connection with the '254 application. Amazon denies the remaining allegations of paragraph 40 of the Complaint. Answering for AWS, AWS lacks knowledge or information sufficient to form a belief as to the truth of the allegations in paragraph 40 of the Complaint, and therefore denies them. Answering for Twitch, Twitch lacks knowledge or information sufficient to form a belief as to the truth of the allegations in paragraph 40 of the Complaint, and therefore denies them.

41. Answering for Amazon, Amazon admits that ATI filed the '254 application on March 2, 2015 and that the '254 application was titled "PROCESSING OF LONG RUNNING PROCESSES." Amazon further admits that ATI is a wholly-owned subsidiary of Amazon. The remaining allegations call for legal conclusions to which no response is required. To the extent a response is required, Amazon denies the remaining allegations of paragraph 41 of the Complaint. Answering for AWS, AWS lacks knowledge or information sufficient to form a belief as to the truth of the allegations in paragraph 41 of the Complaint, and therefore denies them. Answering for Twitch, Twitch lacks knowledge or information sufficient to form a belief as to the truth of the allegations in paragraph 41 of the Complaint, and therefore denies them.

42. Defendants admit that, on its face, the '254 application states that it was filed by an attorney in Baker & Hostetler LLP's Philadelphia, Pennsylvania office. Defendants lack knowledge or information sufficient to form a belief as to the truth of the allegations in paragraph 42 of the Complaint, and therefore deny them.

43. Defendants admit that, on its face, Exhibit 12 purports to be a copy of an Office Action issued by the United States Patent and Trademark Office (the "PTO") regarding the '254 application. Defendants admit that Exhibit 12 speaks for itself. Defendants deny the factual allegations in paragraph 43 of the Complaint to the extent they are contradicted by the file history of U.S. Patent No. 9,703,594 (the '594 patent.').

44. Defendants admit that Exhibit 12 speaks for itself. Defendants deny the factual

1 allegations in paragraph 44 of the Complaint to the extent they are contradicted by the file history
2 of the '594 patent.

3 45. Defendants admit that, on its face, Exhibit 12 states that the PTO rejected claims 15,
4 18, 19, and 20 of the '254 application on the basis that those claims were invalid under 35 U.S.C.
5 §102(a)(1). Defendants further admit that, on its face, Exhibit 12 states that the PTO rejected claims
6 1-14 and 17 on the basis that those claims were invalid under 35 U.S.C. §103. Defendants deny the
7 factual allegations in paragraph 45 of the Complaint to the extent they are contradicted by the file
8 history of the '594 patent.

9 46. Defendants admit that, on its face, Exhibit 12 identifies the '473 patent as a prior art
10 reference upon which the examiner relied, alone or in combination, to reject the claims of the '254
11 application. Defendants deny the factual allegations in paragraph 46 of the Complaint to the extent
12 they are contradicted by the file history of the '594 patent.

13 47. Defendants admit that Exhibit 12 speaks for itself. Defendants deny the factual
14 allegations in paragraph 47 of the Complaint to the extent they are contradicted by the file history
15 of the '594 patent.

16 48. Defendants admit that Exhibit 12 speaks for itself. Defendants deny the factual
17 allegations in paragraph 48 of the Complaint to the extent they are contradicted by the file history
18 of the '594 patent.

19 49. Defendants admit that, on its face, Exhibit 12 states that on May 31, 2016 the PTO
20 issued a final office action rejecting claims 1 and 2 as anticipated under 35 U.S.C. §102(a)(1), and
21 5-6, 9-16, and 18-20 as obvious under 35 U.S.C. §103, in part, based on disclosures in the '473
22 patent. Defendants deny the factual allegations in paragraph 49 of the Complaint to the extent they
23 are contradicted by the file history of the '594 patent.

24 50. Defendants admit that Exhibit 12 speaks for itself. Defendants deny the factual
25 allegations in paragraph 50 of the Complaint to the extent they are contradicted by the file history
26 of the '594 patent.

27 51. Defendants deny the allegations in paragraph 51 of the Complaint.

28 52. Answering for Amazon, Amazon admits that ATI uses Baker & Hostetler LLP as

1 patent prosecution counsel. The remaining allegations in paragraph 52 of the Complaint relate
2 solely to BSD's claim of willful infringement against Twitch. That claim has been dismissed, so
3 no further response is required. *See* Dkt. No. 51.

4 53. No response is required to the allegations in paragraph 53 of the Complaint because
5 they relate solely to Plaintiff's claim of willful infringement against Twitch, which has been
6 dismissed. *See* Dkt. No. 51.

7 54. Defendants deny the allegations in paragraph 54 of the Complaint.

8 55. Defendants deny the allegations in paragraph 55 of the Complaint.

9 56. Defendants deny the allegations in paragraph 56 of the Complaint.

10 **Amazon's Infringement of the '473 Patent**

11 57. Answering for Amazon and AWS, Amazon and AWS admit that AWS "Elemental
12 Live" streaming services use the HLS and MPEG-DASH standards. Amazon and AWS also admit
13 that certain services offered under the AWS "Elemental Media Services" name use the HLS and
14 MPEG-DASH standards. Amazon and AWS deny infringement, either literally or under the
15 doctrine of equivalents, of any valid and enforceable claim of the '473 patent. Answering for
16 Amazon and AWS, the allegations regarding "reasonably similar services" in paragraph 57 of the
17 Complaint are so vague and ambiguous that AWS and Amazon cannot reasonably prepare a
18 response and deny those allegations. Amazon and AWS also deny all remaining allegations in
19 paragraph 57 of the Complaint. Answering for Twitch, Twitch lacks knowledge or information
20 sufficient to form a belief as to the truth of the allegations in paragraph 57 of the Complaint, and
21 therefore denies them.

22 58. Answering for Amazon and AWS, Amazon and AWS deny the allegations in
23 paragraph 58 of the Complaint. Answering for Twitch, Twitch lacks knowledge or information
24 sufficient to form a belief as to the truth of the allegations in paragraph 58 of the Complaint, and
25 therefore denies them.

26 **Twitch's Infringement of the '473 Patent**

27 59. Answering for Twitch, Twitch admits that Twitch Live Streaming uses the HLS
28 standard. Twitch denies infringement, either literally or under the doctrine of equivalents, of any

1 valid and enforceable claim of the '473 patent. Answering for Twitch, the allegations regarding
2 “reasonably similar services” in paragraph 59 of the Complaint are so vague and ambiguous that
3 Twitch cannot reasonably prepare a response and denies those allegations. Twitch also denies all
4 remaining allegations in paragraph 59 of the Complaint. Answering for Amazon and AWS,
5 Amazon and AWS lack knowledge or information sufficient to form a belief as to the truth of the
6 allegations in paragraph 59 of the Complaint, and therefore deny them.

7 60. Answering for Twitch, Twitch denies the allegations in paragraph 60 of the
8 Complaint. Answering for Amazon and AWS, Amazon and AWS lack knowledge or information
9 sufficient to form a belief as to the truth of the allegations in paragraph 60 of the Complaint, and
10 therefore deny them.

11 **Defendants’ Intertwined Infringing Services and Relationship**

12 61. Defendants admit that HLS is a video streaming communications protocol.
13 Defendants deny the remaining allegations in paragraph 61 of the Complaint.

14 62. Defendants deny the allegations in paragraph 62 of the Complaint.

15 63. Answering for Amazon and AWS, Amazon and AWS admit that “Elemental Live”
16 streaming services use the HLS and MPEG-DASH standards. Amazon and AWS also admit that
17 certain services offered under the AWS “Elemental Media Services” name use the HLS and MPEG-
18 DASH standards. Amazon and AWS lack knowledge or information sufficient to form a belief as
19 to the truth of the allegations in paragraph 63 of the Complaint regarding Twitch, and therefore
20 deny them. Answering for Twitch, Twitch admits that its streaming services use the HLS standard.
21 Twitch lacks knowledge or information sufficient to form a belief as to the truth of the allegations
22 in paragraph 63 of the Complaint regarding Amazon and AWS, and therefore denies them.
23 Defendants deny infringement, either literally or under the doctrine of equivalents, of any valid and
24 enforceable claim of the '473 patent. The remaining allegations in paragraph 63 of the Complaint
25 call for a legal conclusion to which no response is required. To the extent a response is required,
26 Defendants deny them.

27 64. Defendants deny infringement, either literally or under the doctrine of equivalents,
28 of any valid and enforceable claim of the '473 patent. Defendants deny the remaining allegations

1 in paragraph 64 of the Complaint.

2 65. Defendants admit that the image in paragraph 65 of the Complaint appears in
3 Exhibit 8 to the Complaint. The remaining allegations in paragraph 65 of the Complaint call for a
4 legal conclusion to which no response is required. To the extent a response is required, Defendants
5 deny them.

6 66. The allegations in paragraph 66 of the Complaint call for a legal conclusion to which
7 no response is required. To the extent a response is required, Defendants deny them.

8 67. The allegations in paragraph 67 of the Complaint call for a legal conclusion to which
9 no response is required. To the extent a response is required, Defendants deny them.

10 68. Defendants admit that the quoted language in paragraph 68 of the Complaint appears
11 in Exhibit 9 to the Complaint. The remaining allegations in paragraph 68 of the Complaint call for
12 a legal conclusion to which no response is required. To the extent a response is required, Defendants
13 deny them.

14 69. Defendants admit that Twitch is a wholly-owned subsidiary of Amazon. Defendants
15 deny the remaining allegations in paragraph 69 of the Complaint.

16 70. Defendants admit that the image in paragraph 70 of the Complaint appears in
17 Exhibit 14 to the Complaint. Answering for AWS and Twitch, AWS and Twitch admit that AWS
18 operates a streaming channel on Twitch. Amazon and AWS deny all remaining allegations in
19 paragraph 70 of the Complaint. Answering for Twitch, Twitch lacks knowledge or information
20 sufficient to form a belief as to the truth of the allegations regarding Amazon “stream[ing] its own
21 live video, such as through Prime Video” in paragraph 70 of the Complaint, and therefore denies
22 them. Twitch denies all remaining allegations in paragraph 70 of the Complaint.

23 71. Defendants admit that the image in paragraph 71 of the Complaint appears in
24 Exhibit 15 to the Complaint, which purports to be an article published on the New York Times
25 website on September 30, 2016. The remaining allegations in paragraph 71 are so vague and
26 ambiguous that Defendants cannot reasonably prepare a response and deny those allegations.

27 72. Defendants admit that, on its face, Exhibit 16 purports to be an article announcing
28 the launch of Twitch Prime. Defendants deny that Prime Video is combined with Twitch’s live

1 streaming to form Twitch Prime. The remaining allegation in paragraph 72 of the Complaint are so
2 vague and ambiguous that Defendants cannot reasonably prepare a response and deny those
3 allegations.

4 73. Defendants admit that the quote in paragraph 73 of the Complaint appears in
5 Exhibit 17 to the Complaint, which purports to be a blog post from Twitch's website. Defendants
6 also admit that Twitch uses AWS infrastructure. The allegations regarding "Amazon rel[ying] on
7 Twitch, [and] Twitch also rel[ying] on Amazon" are so vague and ambiguous that Defendants
8 cannot reasonably prepare a response and deny those allegations.

9 74. Allegations in paragraph 74 of the Complaint that "the Amazon and Twitch
10 relationship extends to the legal realm" are so vague and ambiguous that Defendants cannot
11 reasonably prepare a response and deny those allegations. Defendants incorporate by reference their
12 response to paragraph 52 of the Complaint.

13 75. Defendants admit that the image in paragraph 75 of the Complaint appears in
14 Exhibit 18 to the Complaint, which purports to be an article published on fortune.com. Defendants
15 deny that Exhibit 18 states that Twitter's CEO Emmett Shear confirmed that Twitch is part of AWS.
16 The remaining allegations in paragraph 75 of the Complaint call for a legal conclusion to which no
17 response is required. To the extent a response is required, Defendants deny the remaining
18 allegations in paragraph 75 of the Complaint.

19 76. Defendants deny the allegations in paragraph 76 of the Complaint.

20 **COUNT ONE**
21 **Patent Infringement By Amazon**

22 77. Defendants reincorporate their responses to paragraphs 1 through 76 of the
23 Complaint as if fully set forth herein.

24 78. Defendants deny infringement, either literally or under the doctrine of equivalents,
25 of any valid and enforceable claim of the '473 patent. Answering for Amazon and AWS, Amazon
26 and AWS deny the remaining allegations in paragraph 78 of the Complaint. Answering for Twitch,
27 Twitch lacks knowledge or information sufficient to form a belief as to the truth of the allegations
28 in paragraph 78 of the Complaint, and therefore denies them.

79. Defendants deny infringement, either literally or under the doctrine of equivalents, of any valid and enforceable claim of the '473 patent. Answering for Amazon and AWS, Amazon and AWS deny the remaining allegations in paragraph 79 of the Complaint. Answering for Twitch, Twitch lacks knowledge or information sufficient to form a belief as to the truth of the allegations in paragraph 79 of the Complaint, and therefore denies them.

80. Answering for Amazon, Amazon denies that it had notice of the '473 patent prior to the filing of the complaint or that it has willfully infringed the '473 patent. Answering for AWS, the allegations in paragraph 80 of the Complaint relate solely to BSD's claim of willful infringement. That claim has been dismissed as to AWS, so no further response is required. *See* Dkt. No. 51. Defendants deny infringement, either literally or under the doctrine of equivalents, of any valid and enforceable claim of the '473 patent. Answering for Amazon and AWS, Amazon and AWS deny the remaining allegations in paragraph 80 of the Complaint. Answering for Twitch, Twitch lacks knowledge or information sufficient to form a belief as to the truth of the allegations in paragraph 80 of the Complaint, and therefore denies them.

81. Answering for Amazon and AWS, Amazon and AWS deny the allegations in paragraph 81 of the Complaint. Answering for Twitch, Twitch lacks knowledge or information sufficient to form a belief as to the truth of the allegations in paragraph 81 of the Complaint, and therefore denies them.

COUNT TWO

Patent Infringement By Twitch

82. Defendants reincorporate their responses to paragraphs 1 through 81 as if fully set forth herein.

83. Defendants deny infringement, either literally or under the doctrine of equivalents, of any valid and enforceable claim of the '473 patent. Answering for Twitch, Twitch denies the remaining allegations in paragraph 83 of the Complaint. Answering for Amazon and AWS, Amazon and AWS lack knowledge or information sufficient to form a belief as to the truth of the remaining allegations in paragraph 83 of the Complaint, and therefore deny them.

84. Defendants deny infringement, either literally or under the doctrine of equivalents,

1 of any valid and enforceable claim of the '473 patent. Defendants admit that Amazon and AWS
2 stream video on Twitch. Answering for Twitch, Twitch denies the remaining allegations in
3 paragraph 84 of the Complaint. Answering for Amazon and AWS, Amazon and AWS lack
4 knowledge or information sufficient to form a belief as to the truth of the remaining allegations in
5 paragraph 84 of the Complaint, and therefore deny them.

6 85. No response is required to the allegations in paragraph 85 of the Complaint because
7 they relate solely to Plaintiff's claim of willful infringement against Twitch, which has been
8 dismissed. *See* Dkt. No. 51. To the extent a response is required, Defendants deny them.

9 86. Answering for Twitch, Twitch denies the allegations in paragraph 86 of the
10 Complaint. Answering for Amazon and AWS, Amazon and AWS lack knowledge or information
11 sufficient to form a belief as to the truth of the allegations in paragraph 86 of the Complaint, and
12 therefore deny them.

13 **PRAYER FOR RELIEF**

14 Plaintiff's prayer for relief does not state any allegations to which a response is required.
15 To the extent a response is required, Defendants deny that Plaintiff is entitled to any of the relief
16 requested in Plaintiff's prayer for relief, including paragraphs (a) through (g), or to any other relief
17 in any form whatsoever. Defendants further deny each and every allegation contained in the
18 Complaint to which it has not specifically responded. Defendants further respond that Plaintiff is
19 not entitled to the relief requested in paragraphs (c) and (d), to the extent it relates to Plaintiff's
20 willful infringement claims against Twitch and AWS, because those claims have been dismissed.
21 *See* Dkt. No. 51.

22 **JURY DEMAND**

23 Plaintiff's demand for a jury trial does not state any allegations to which a response is
24 required.

25 **ADDITIONAL DEFENSES**

26 Subject to the responses above, Defendants allege and assert the following defenses in
27 response to Plaintiff's allegations, undertaking the burden of proof only as to those defenses
28 deemed affirmative defenses by law, regardless of how such defenses are denominated herein.

1 Defendants specifically reserve all rights to allege additional defenses that become known through
2 the course of discovery in this action.

3 **FIRST DEFENSE**
4 **(Noninfringement)**

5 Defendants have not infringed any valid and enforceable claim of the asserted patent, either
6 literally or under the doctrine of equivalents, and have not otherwise committed any acts in violation
7 of 35 U.S.C. § 271.

8 **SECOND DEFENSE**
9 **(Invalidity)**

10 The asserted patent is invalid for failing to comply with one or more of the conditions and
11 requirements of 35 U.S.C. §§ 101, 102, 103, and/or 112 at least because it lacks patentable subject
12 matter, is not new or novel in light of the prior art, is obvious in light of the prior art, is indefinite,
13 fail to provide an adequate written description, and/or fail to enable one of skill in the art to make
14 and use the alleged invention described and claimed.

15 **THIRD DEFENSE**
16 **(Prosecution History Estoppel)**

17 The claims in the asserted patent are limited by the prior art, by their terms, and/or by
18 representations made to the United States Patent and Trademark Office during prosecution of the
19 application which resulted in the asserted patent, such that none of the asserted claims are infringed
20 by Defendants.

21 **FOURTH DEFENSE**
22 **(Collateral Estoppel)**

23 Plaintiff is collaterally estopped from alleging that any claims of the '473 patent infringe
24 the HLS standard following the final judgment of non-infringement entered in *Emblaze Ltd. v.*
25 *Apple Inc.*, 5-11-cv-01079 (N.D. Cal.), *aff'd* 639 Fed. Appx. 639 (Fed. Cir. 2016).

1 **FIFTH DEFENSE**
2 **(Unenforceability)**

3 The '473 patent is unenforceable against Defendants' implementations of MPEG-DASH
4 because of the doctrines of estoppel, laches, unclean hands, patent exhaustion, implied license,
5 and/or other equitable doctrines. Plaintiff has engaged in standards-setting misconduct by
6 breaching its commitments to license declared-essential patents on reasonable and non-
7 discriminatory ("RAND") terms.

8 Plaintiff declared the '473 patent as essential to compliance with the MPEG-DASH standard
9 promulgated by the International Organization for Standardization ("ISO"). In doing so, Plaintiff
10 committed to license the '473 patent on RAND terms to all implementers of the MPEG-DASH
11 standard. This RAND commitment imposes ongoing contractual obligations on the '473 patent that
12 are binding on Plaintiff.

13 In breach of its RAND obligations, Plaintiff failed to offer Defendants a license to the '473
14 patent before initiating this litigation. Plaintiff's failure to comply with its RAND obligations estops
15 Plaintiff from enforcing the '473 patent against Defendants' implementations of the MPEG-DASH
16 standard. Plaintiff's failure to comply with its RAND obligations also constitutes patent misuse and
17 unclean hands, which preclude Plaintiff from obtaining relief from Defendants for any purportedly
18 infringing implementation of the MPEG-DASH standard in this action.

19 **SIXTH DEFENSE**
20 **(Limitation on Damages and Costs)**

21 Plaintiff's claims for relief are barred in whole or in part, including pursuant to 35 U.S.C.
22 § 286 and on the basis of Plaintiff's RAND commitments.

23 As noted in Defendants' Fifth Defense, above, Plaintiff declared the '473 patent as essential
24 to compliance with the MPEG-DASH standard promulgated by the ISO. In doing so, Plaintiff
25 committed to license the '473 patent on non-discriminatory and reasonable terms to all
26 implementers of the MPEG-DASH standard. This RAND commitment imposes ongoing
27 contractual obligations on the '473 patent that are binding on Plaintiff. Any recovery for
28

1 infringement of the '473 patent by Defendants' implementations of the MPEG-DASH standard is
2 limited to royalties that are consistent with BSD's RAND obligations.

3 **SEVENTH DEFENSE**
4 **(License)**

5 To the extent the '473 patent is essential to any ISO standard, and to the extent the use of
6 any of the alleged inventions described in or allegedly infringed by the '473 patent are used,
7 developed, or sold by Defendants or their customers, Defendants have a license to the '473 patent
8 on RAND terms or, in the alternative, Defendants have the irrevocable right to license the '473
9 patent on RAND terms.

10 **EIGHTH DEFENSE**
11 **(Reserved)**

12 Defendants specifically reserve the right to assert any and all defenses, affirmative or
13 otherwise, that may become available through information developed in discovery in this action.

14 **JURY DEMAND**

15 Pursuant to Fed. R. Civ. P. 38(b), Defendants demand a trial by jury on all claims and issues
16 so triable.

17
18 Dated: August 30, 2023

PERKINS COIE LLP

19
20 By: /s/ Stefani E. Shanberg
Stefani E. Shanberg

21
22 Attorneys for Defendants
23 AMAZON.COM, INC.,
24 AMAZON WEB SERVICES, INC., and
25 TWITCH INTERACTIVE, INC.
26
27
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